and Z4, the index of refraction in sublayer **214** preferably increases monotonically (i.e., the index of refraction is ever increasing from point **594** to point **596**). At point **596**, the index of refraction may be exactly or approximately matched to the index of refraction n**2** of adjoining layer **204**. Between Z**5** and Z**6**, layer **204** has a fixed index of refraction of n**2**, as illustrated by index of refraction profile segment **582**.

[0075] Continuously varying profile **590** of FIG. **13** is merely illustrative and does not serve to limit the scope of the present invention. In general, the matching layer interposed between layers **202** and **204** may include any number of sublayers having one or more reverse matching layers, as long as the profile is substantially matched to n1' at point **592** and to n**2** at point **596**. In other words, some matching layers can include two or more non-adjacent reverse matching sublayers, three or more non-adjacent reverse matching sublayers, etc. With the arrangement of FIG. **12**, index of refraction discontinuities, which can lead to undesired reflections and visible artifacts, are minimized. The smooth gradually varying index values between points **592** and **596** avoid abrupt large index of refraction discontinuities and thereby avoid reflections.

[0076] In accordance with another suitable arrangement, multiple matching layers may be formed between display layers **200** and **204**. Display layer **202** need not be formed. FIG. **14** is a diagram showing how multiple matching layers may be stacked to provide reflection suppression at more than one wavelength. As shown in FIG. **14**, a first matching layer **210-1** that includes its own reverse matching sublayer **214-1** may be formed under layer **200**, whereas a second matching layer **210-2** that includes its own reverse matching sublayer **214-2** may be formed between layers **210-1** and **204**. Matching layers **210-1** and **210-2** may be implemented using the three-layer configuration of FIG. **8**, using the two-layer configuration of FIG. **12**, or using any number of sublayers having at least one reverse matching sublayer.

[0077] The reverse matching sublayer **214-1** of matching layer **210-1** may have a thickness d**1**, whereas the reverse matching sublayer **214-2** of matching layer **210-2** may have a thickness d**2**. Thickness d**2** may generally be different than thickness d**1**. If desired, thickness d**1** may be set equal to thickness d**2**. Superimposed in this way, thickness d**1** of reverse matching layer **214-1** may be selected to provide enhance reflection reduction at a first visible wavelength while thickness d**2** of reverse matching layer **214-2** may be selected to provide enhanced reflection reduction at a second visible wavelength that is different than the first visible wavelength.

[0078] FIG. **15** is a graph in which the amount of reflection from a display has been plotted as a function of wavelength. The graph of FIG. **15** covers visible light wavelengths ranging from 390 nm to 800 nm. Line **700** corresponds to reflection from a display that includes a matching layer of FIG. **7**. Line **702** illustrates the result when display **14** is provided with multiple matching layers in the way shown in FIG. **14**. As shown by line **702**, this type of arrangement can result in additional reflection reduction of ΔR**1** at wavelength λ_{X1} (which is set by thickness d**1**) and of ΔR**2** at wavelength λ_{X2} (which is set by thickness d**2**). In general, any number of matching layers can be stacked in this way to help reduce reflections at any desired number of wavelengths.

[0079] The foregoing is merely illustrative and various modifications can be made by those skilled in the art without departing from the scope and spirit of the described embodiments. The foregoing embodiments may be implemented individually or in any combination.

What is claimed is:

1. Display circuitry, comprising:

a first display layer having a first index of refraction that is substantially fixed;

a second display layer having a second index of refraction that is substantially fixed, wherein the second index of refraction is different than the first index of refraction; and

a matching layer interposed between the first and second display layers, wherein the matching layer has a first portion having a graded index of refraction that monotonically increases from the first display layer to the second display layer and a second portion having a graded index of refraction that monotonically decreases from the first display layer to the second display layer.

2. The display circuitry defined in claim **1**, wherein the matching layer further includes a third portion having a graded index of refraction that monotonically increases from the first display layer to the second display layer.

3. The display circuitry defined in claim **2**, wherein the second portion of the matching layer is interposed between the first and third portions of the matching layer.

4. The display circuitry defined in claim **1**, wherein the second portion of the matching layer has a thickness that determines what wavelength additional reflection suppression is provided.

5. The display circuitry defined in claim **1**, wherein the first portion of the matching layer has a first surface with an index of refraction that matches with the first index of refraction.

6. The display circuitry defined in claim **5**, wherein the first portion of the matching layer has a second surface with another index of refraction, and wherein the second portion of the matching layer has a surface with an index of refraction that matches the another index of refraction.

7. The display circuitry defined in claim **1**, further comprising:

an additional matching layer interposed between the first the second display layers.

8. The display circuitry defined in claim **7**, wherein the additional matching layer comprises:

a first portion having a graded index of refraction that monotonically increases from the first display layer to the second display layer; and

a second portion having a graded index of refraction that monotonically decreases from the first display layer to the second display layer.

9. The display circuitry defined in claim **1**, wherein the first index of refraction is less than the second index of refraction.

10. The display circuitry defined in claim **1**, wherein incoming light traverses the first display layer before traversing the second display layer.

11. An electronic device, comprising:

a housing; and

a display in the housing, wherein the display comprises:

a first layer having a substantially fixed refractive index;